INDEX

	PAGE
Aberdeen, Observation of aurora...	63
Abstracts of meteorological literature	42
Actinometry, Bibliography of ...	263
Adams, D. T., Geography of the Gold Coast (review)	168
Aerology	45
Aeroplane, Cloud formed by an 139,	288
Agra, Temperature and pressure in the upper atmosphere over	143
—, Wind at	44
—, Winds in higher levels over ...	20
Air density at M.S.L. over India	44
Ali, B., Temperature inside Stevenson screens (review) ...	265
—, Wind at Agra (review) ...	44
— and S. N. Naqvi, Frost and the preceding meteorological conditions (review)	96
Alpine climatology	166
Alto-cumulus formed by an aeroplane	139
Alzate, Academia Nacional de Ciencias Antonio	66
Andine eruptions, Atmospheric effects resulting from ...	164
Anemometer vane, Sights for ...	94
Anemometers and the Beaufort scale of wind force	278
Angström, A., Actinometry and volcanic eruptions	86
Anvil cloud, Rapidly dissolving...	115
Apia Observatory Report	293
Armagh, Halo phenomena ...	94
Ashmore, S. E., Fog with unsaturated air at Gravshott ...	37
—, Parahelion or Paraselena ...	185
—, Problems in meteorological optics	113
—, Surface horizontal visibility with saturated air	7
—, Thunderstorm phenomena ...	211
Assam, Rainfall of	113
Athens, Annals of the Observatory at	144
Atlas of the German coasts, Climatological	291
Aurora at Aberdeen, March 28th, 1932	63
Australia, Rainfall maps of ...	218
Baker, J. N. L., Climate of England in the 17th century ...	91
Balk, J. G., Swan song of the Radcliffe Observatory	286
Balloons, storage of	16
Banerji, S. K., and V. M. Ghatagei, Discontinuous fluid motion (review)	291
Barometers, Patent Fortin and Observatory	72
Barometric maxima in pairs ...	40
Barometric pressure, Rapid falls of	66
Barometric tendencies for local forecasting in India, Utility of	169
Batty, R. P., Utility of barometric tendencies for local forecasting in India (review)	169
Bauer, L. A.	98
Beaufort scale of wind force and anemometers	278
Beckett, H. E. and A. F. Dufton, Terrestrial temperatures ...	252
Belasco, J. E., Casella barometers (review)	72
—, Standard Meteorological instruments and Mercury-in-Steel thermometers (review)...	21
Bell Rock, High wind at	133
Bell, T. D.	265
Bengal, Nov. 13th-19th, 1928, Storm in the Bay of	169
Bennett, M. G., Colour of moonlight	285
—, Visual range of lights at night	37
Bentley, W. A.	46
— and W. J. Humphreys, snow crystals (review)	53
Bermuda, Meteorological station at	238
Besson, L., Supplementary tangent arcs to the 22° halo ...	235
Bibliography of Actinometry ...	263
Bigg, W. H., Cloud formation by an aeroplane	288

PAGE

Bigg, W. H., Day temperatures in early spring 95
—, Tornadoes at South Farnborough 162
Bigourdan, G. 75, 99
Bilham, E. G., Colour of Moonlight 254
—, Frequency curve of daily rainfall 201
—, Life Work of W. H. Dines... 105
—, Rain in places 239
—, Splashing of rain with reference to evaporation tanks ... 86
—, Swan song of the Radcliffe Observatory 191
Bliss, E. W., and Sir Gilbert Walker, World Weather ... 284
Boerema, J., Rain-days in Java and Madoera (review)... ... 145
Bonacina, L. C. W., Fronts ... 65
—, Extremes of heat in August... 183
—, Storms that just fail to come off 137
Books received 22, 46, 75, 121, 146, 170, 193, 293
Botley, C. M., Solar phenomena 286
—, Supplementary tangent arcs to the 22° halo... 213
Bournemouth, Roll cloud seen at 132
Bower, S. M., Summer thunderstorms 63
Braak, C., Air and earth temperature (review) 217
British Association for the Advancement of Science... ... 294
British Isles, Ice in Davis Strait and the weather of the ... 153
Brooks, C. E. P., Ice in Davis Strait and the weather of the British Isles 153
—, Movement of volcanic dust over the globe 81
—, Obituary of T. B. Bell... ... 265
—, Variations of the general circulation 9
—, Winds in London during the 19th century 56
— and T. M. Hunt, Zonal distribution of rainfall 114
Brooks, C. F. 47
— and E. M. Fitton, Soil temperatures (review) 46
Brunt, D., Combination of observations (review) 69
—, Pyrheliometric measurements of solar radiation in Upsala (review) 71
—, Radiation in the atmosphere... 92

PAGE

Cambridge, Solar halos and mock suns at 11
Caps for wet-bulb thermometers, Muslin 16
Cardington, Report on experiments on structure of wind at 114
Casella, C. F., and Co., Ltd., Patent barometers (review) ... 72
Castens, G., Wetterhaftigkeit (review) 74
Cave, C. J. P., Phenological Report, 1931 253
Champion, D. L., Effect of hills on winds of low velocity ... 129
Christie, R. A., Obelisk shattered by lightning 136
Circulation, Variations of the general 9
Cirera, R. 242
Cirrus band, A remarkable ... 93
— cloud motion and west-moving depression 89
Clark, J. E., Persistent drought... 39
—, Phenological Report, 1931 ... 253
—, Series of rainbows 236
Clarke, G. A., International Atlas of Clouds 225
—, Obituary of J. E. Crombie ... 194
—, Meteor of Sept. 26th, 1932 ... 258
Climate of England in the 17th century 91
Climatological Tables for the British Empire ... *monthly*
Climatology, Alpine 166
—, Outlines of 141
Cloud formation at the cirrus level by means of an aeroplane ... 288
Cloud formation, Unusual 185, 235
Cloud, Rapidly dissolving anvil ... 115
Cloud seen at Bournemouth, Roll 132
Clouds, International Atlas of ... 225
Colombo, May 10th, 1932, Heavy rain at 180
Colombo Observatory, Ceylon ... 147
Cornwall, Line squall in 215
Cowper, J. E., Weather of Oct., 1932 257
Cox, G. W. 122
Crichton, J., Drought in Scotland, 1932 32
—, Mildness of the winter 1931-2 in Scotland 119
Crombie, J. E. 170, 194
Crossley, A. F., High wind at Bell Rock 133
—, Wetterhaftigkeit (review) ... 74
Crowther, J. G., Osiris and the atom (review) 292
Cycles, Investigation of 290

PAGE

Daking, C. W. G., Meteorology of Kamaran Island 91
Dancey, R. P., Snowless winter 38
Draper, D. 147
Davis Strait and the weather of the British Isles, Ice in ... 153
Davison, J. F. 99
Dead Sea, Bands of foam on the 41
Depressions and cirrus cloud motion, West moving ... 89
Desai, B. N. and S. Mal, Bay storm of Nov., 1926 (review) 264
Diffusion on a cold front 37
Dines, J. S., Locking of rain-gauge funnels 289
Dines, L. H. G., Upper air temperatures and humidities at Peshawar and Quetta (review) 144
Dines, W. H., Life work of ... 105
Douglas, C. K. M., Pressure and temperature over Agra and India (review) 143
—, Rhön-Rossitten Co. Publications (review) 43
—, Storm in the Bay of Bengal, Nov. 13th-19th, 1928, and utility of barometric tendencies for local forecasting (reviews) 169
—, Thunderstorm, Aug. 12th, 1932 ... ... 188, 210
—, Turbidity factor and air mass in weather analysis (review)... 242
—, West-moving depressions and cirrus cloud motion 89
—, Wetter und Wetterentwicklung (review) 95
Drought and high pressure of February 39
Drought in Scotland during January and February, 1932... 32
Drought of 1932, Spring 67
Drought, Persistent 39
Dufton, A. F. and H. E. Beckett, Terrestrial temperatures ... 252
Durst, C. S., Breakdown of steep wind gradients in inversions 284
—, Thermal balance of a water-drop or ice particle 283
Durward, J., Bands of foam on the Dead Sea 41
Dyke-Marsh, H. St. G., Wind and Tide 34

Edinburgh, Exhibition by the Royal Meteor. Society in ... 43
Eginitis, D., Annales de l'Observatoire National d'Athènes (review) 144
Ellison, W. F. A., Halo phenomena, Armagh 94
England, August, 1932, Hot weather in 177
England in the 17th century, Climate of 91
Entwistle, F. 22
Eruptions, Atmospheric effects resulting from Andine ... 164
Eskdalemuir, Meteor seen from ... 214
Evaporation tanks, Splashing of rain with reference to ... 86

Fairgrieve, M. M., Duration of lightning flash 257
Ficker, H. von, Wetter und wetterentwicklung (review) ... 95
Fiji, Severe thunderstorm in ... 67
Fitton, E. M., Soil temperatures in the United States (review) 46
Flooding in Unst, Shetland ... 184
Fluid motion under different thermal conditions, discontinuous 291
Fog with unsaturated air at Grayshott 37
Forecasting in India, Utility of barometric tendencies for ... 169
—, Rainfall of Malta and long-period 203
Fort Rae, British polar expedition to 249
Froc, L. 41, 242
Front, Diffusion on a cold... ... 37
Fronts 65
Frost and the preceding meteorological conditions 96
Funnels, Locking of rain-gauge ... 289

Garbett, L. G., Geography of the Gold Coast (review) 168
Garbett, L. G. and Sir Napier Shaw, A new sort of wind rose 254
Ghatagei, V. M. and S. K. Banerji, Discontinuous fluid motion (review) 291
Ghosh, U. N., Air density at M.S.L. over India (review) ... 44
Giblett, M. A., Structure of wind over level country (review) ... 114
Gibson, W., Halo structure at Waringstown 116
Glasspoole, J., Meteor. Observations, 1929, New Zealand (review) 74
—, Rain-days in Java and Madoera (review) 145

PAGE

Glasspoole, J., Rain spells at Newquay 261
—, Rainfall in New Zealand (review) 96
—, Rainfall maps of Australia and Tasmania (review) ... 218
—, Rainfall of May, 1932... ... 119
—, of 1932 275
—, "Spring" Drought in 1932 67
—, Thunderstorms in New Zealand (review) 97
Gold Coast, Geography of the ... 168
Gold, E., Diffusion on a cold front 37
—, Fronts 65
—, Humours of inspection ... 258
—, Manual's end 1
Goldie, A. H. R., Winter minimum temperatures 12
Goodman, E. W., Halo phenomena 113
Gray, R., Heavy snow in April... 93
Grayshott, Fog with unsaturated air at 37
Gregory, J. W. 121
Grundmann, W., and O. Moese, Turbidity factor and air mass in weather analysis (review) 242
Guernsey, Record dry winter at... 92

Haboob at Khartoum 262
—, Flying through a 216
Haeberlin, C. and P. Perlewitz, Klima Atlas (review) 291
Halo phenomena, Armagh ... 94
— structure at Waringstown ... 116
—, Supplementary tangent arcs to the 22° 213, 235
—, Unusually brilliant lunar ... 257
Halos at Cambridge, Solar ... 11
— of May 10th, 1932, at Padstow 137
Harwood, L. A., Colour of moonlight 284
Hastings, Solar phenomena observed at 64, 236, 285
Hawke, E. L., Extreme barometric maxima in pairs ... 40
—, Intense rain in Hertfordshire 160
—, Thunderstorm of Aug. 12th, 1932 186
Haze at Wei Hai Wei, Dust ... 240
Heat in August, Extremes of 183, 215
Heliopolis, Egypt, Katabatic wind at 228
Henry, A. J. 98
Hergesell, H. 147
Hertfordshire, Intense rain in ... 160
Heywood, G. S. P., Katabatic winds in a valley 254

PAGE

Hinkson, G. A., Well-defined rain area 159
Hood, E. J. 171
Humidities at Peshawar and Quetta, Upper air 144
Humphreys, W. J. and W. A. Bentley, Snow crystals (review)... 53
Hunt, T. M. and C. E. P. Brooks, Zonal distribution of rainfall 114
Hunter, J. 63
Hurricane in eastern United States 216
— —, Porto Rico 217

Ice in Davis Strait and weather of the British Isles 153
Ice particle suspended in the atmosphere, Thermal balance of 283
India, Air density at M.S.L. over 44
—, pressure and temperature over 143
—, Upper winds over 20
Inspection, Humours of 258
Instruments, catalogues of meteorological 21
International weather chart of the northern hemisphere ... 236
Inversions, Breakdown of steep wind gradients in 284
Inwards, R. 63
Italian upper air investigations ... 141
Italy, Changes in 15
Iyer, A. A. N. and K. R. Ramanathan, Madras storm of January, 1929 (review) 44

Jameson, H., Heavy rain at Colombo, May 10th, 1932 ... 180
Java, Rain-days in 145
Jupp, C. A., Remarkable cirrus band 93
—, Unusually brilliant lunar halo 257

Kamaran Island, Meteorology of 91
Karslake, J. B., Grey rain ... 115
Kaye, W. C., Bay storm of Nov., 1926 (review) 264
—, Roll cloud seen at Bournemouth 132
Keen, B. A., Soil physics in relation to meteorology 62
Kentucky, Climate of 20
Kew Observatory, Soil temperature below turf at 135
Khartoum, Haboob at 262
Kidson, E., Rainfall in New Zealand (review) 96
— and A. Thomson, Thunderstorms in New Zealand (review) 97

PAGE

Köppen, W., Grundriss der Klimakunde (review) ... 141
Kruisinga, J. C. M., Colour of moonlight 256

Lempfert, R. G. K., Presentation of meteorological data ... 10
Lewis, L. F., Hot weather in England, Aug., 1932 177
Lightning flash, Duration of ... 257
—, Obelisk shattered by 136
Linke, Actinometry and volcanic dust 86
Lizard, Water Spouts at the ... 161
London during the 19th century, Winds in 56
Lowinger, V. A., Brighter meteorology 164

Madoera, Rain-days in 145
Madras storm of January, 1929... 44
Maguire, C. J., Aerology (review) 45
Mal, S. and B. N. Desai, Bay storm of Nov., 1926 264
Malayan Meteorological Service... 166
Manchester, Intense rain in ... 161
Manley, G., Meteorological records from the Pennines ... 206
Manual's End 1
Margary, I. D. } Phenological
Marshall, R. } report, 1931 ... 253
Marshall, R., Acta Phenologica (review) 241
Martinique, New observatory for 294
Mathews, R. H., Screen and hangar minimum temperatures ... 116
Maurer, J., Actinometry and volcanic dust 86
Mayers, A. E., Sights for anemometer vane 94
McAdie, A. 47
Meteor of Sept. 26th, 1932, Vivid 258
— seen from Eskdalemuir... ... 214
Meteorological Committee ... 266
— data, Presentation of 10
— Lectures 217
— observations, 1929, New Zealand 74
— Office, Annual report 209
— —, Discussions at the 9, 208, 234, 253, 283
— —, Shoeburyness staff dinner... 47
— —, Soirée... 47
— —, War Memorial 232
— Records from the northern Pennines 206
— services of Portugal 239
— Service, Spanish 219
— Society, Royal 10, 36, 62, 91, 113, 135, 253, 283

PAGE

Meteorological Society, Royal, Buchan Prize 253
— — —, Exhibition in Edinburgh 43
— — —, Symons Gold Medal ... 10
Meteorology, Brighter 164
Mill, H. R. 170
Millikan, R. A. 267
Mirage off Newfoundland 259
Mirrlees, S. T. A., Annales de l'Observatoire National d'Athènes (review) 144
—, Autographic records of a "Sumatra" squall 259
—, Climate of the Netherlands (review) 217
—, Smithsonian Meteorological Tables (review) 45
—, Summer weather in Ungava Bay 156
—, Temperatures in Stevenson screens (review) 265
—, Temperature in the lower stratosphere (review) 170
—, Winds, weather and currents on the coasts of India (review) 293
Mock suns at Cambridge 11
Moese, O. and W. Grundmann, Turbidity and air mass in weather analysis (review) ... 242
Monthly Weather Review, Change of Editor 47
Moon, A. E., Solar phenomena observed at Hastings 64, 236, 286
Moonlight, Colour of 234, 254, 256, 284
Morgans, W. R., High pressure of January, 1932 18
Moscow, Scientific Institute established at 147

Naqvi, S. N. and B. Ali, Frost and the preceding meteorological conditions (review) 96
Narayanan, A., Pressure and temperature in the upper atmosphere over India (review) ... 143
—, Upper air temperatures and humidities (review) 144
Negretti and Zambra, Instrument catalogues (review) 21
Netherlands, Air and earth temperature in the... 217
New Zealand Meteorological observations, 1929 74
—, Occurrence of thunderstorms in 97
—, Rainfall in 96
Newfoundland, Mirage off... ... 259
Newquay, Rain spells and wet spells at 261

PAGE

OBITUARY :—
Bauer, Dr. L. A. 98
Bell, T. D. 265
Bentley, W. A. 46
Bigourdan, G. 75, 99
Cirera, Father R. 242
Crombie, Dr. J. E. ... 170, 194
Davison, J. F. 99
Draper, D. 147
Froc, Father L. 242
Gregory, Prof. J. W. 121
Henry, Prof. A. J. 98
Reed, W. G. 146
Sargeant, R. B. 146
Sheerman, J. 218
Watkins, H. G. 193
Wigand, Prof. Dr. A. 294
Observations, Combination of ... 69
Ockenden, C. V., Katabatic wind at Heliopolis 228
O'Connor, E. D., Drought and high pressure of February ... 39
O'Connor, M., Thunderstorm, Aug. 12th, 1932 190
Official Publications ... 114, 209
Oliver, J. F., Aurora seen at Aberdeen 63
Optical phenomena 64
Optics, Problems in meteorological 109
Oscillations, Resonance theory of semidiurnal atmospheric ... 135
Osiris and the atom 292

Padstow, Halos of May 10th, 1932 at 137
Parhelion or Paraselena 185
Patterson, J., Summer weather in Ungava Bay 210
Pennines, Meteorological records from the northern 206
Perlewitz, P. and C. Haeberlin, Klima Atlas (review) 291
Peshawar, Upper air temperatures and humidities 144
Pick, W. H., Visibility at sea ... 36
Plant life and the siccation process 142
Polar expedition to Fort Rae, British 249
Port Blair, Winds in the first 3 Km. over 20
Porto Rico, Hurricane in 217
Portugal, Meteorological Services 239
Potential gradient, Variations in... 126
Pressure in the upper atmosphere over Agra 143
— — — — — India 143
— of February, 1932, High 29, 39
— of January, 1932, High ... 18

PAGE

Prosser, T. F., Unusual cloud formation 185
Pugh, J. B. W. 122

Quetta, Upper air temperatures and humidities at 144

Radcliffe Observatory, Swan song of the 191, 286
Radiation in the atmosphere ... 92
— in Upsala, Pyrheliometric measurements of 71
Rain area, Well-defined 159
— at Colombo, May 10, 1932 ... 180
Rain days in Java and Madoera 145
Rain-gauge funnels, locking of ... 289
—, Grey 115
— in Hertfordshire, Intense ... 160
— in Manchester, Heavy... ... 161
— in places 239
— spells at Newquay 261
—, Unusually persistent 13
— with reference to evaporation tanks, Splashing of 86
Rainbow, Lunar 263
Rainbows, Reflection 213
—, Series of 236
Rainfall at Rothamsted, Secular variation of 113
—, British, 1931 167
—, Frequency curve of daily ... 201
— in New Zealand 96
— in Unst, Shetland, Heavy ... 184
— maps of Australia and Tasmania 218
— of Assam 113
— of Malta and long-period forecasting 203
— of May, 1932 119
— of 1932 275
— over the earth, Zonal distribution of 114
— tables, 1932 ... ... *monthly*
— 1932, General distribution *monthly*
Ramakrishnan, K. P., Winds in the first 3 Km. over Port Blair (review) 20
Ramanathan, K. R. and A. A. N. Iyer, Madras storm of Jan., 1929 (review) 44
—, Storm in the Bay of Bengal, Nov. 13th-19th, 1928 (review) 169
—, Temperatures in Stevenson screens (review) 265
Rao, P. R. K., Temperature in the lower stratosphere (review) ... 170
Ras, S. G., Temperature and pressure over Agra (review) ... 143
Rastall, R. H., Solar halos and mock suns at Cambridge ... 11

PAGE

Read, R. S., Dust haze at Wei Hai Wei 240
Reed, W. G. 146
Reviews :—
Actinometry, Bibliography of... 263
Adams, D. T.—Geography of the Gold Coast : L. G. Garbett ... 168
Ali, B.—Wind at Agra 44
—, and S. N. Naqvi—Frost and the preceding meteorological conditions 96
Banerji, S. K. and V. M. Ghatagei—Discontinuous fluid motion; (Sir) G(ilbert) Walker 291
Bentley, W. A. and W. J. Humphreys—Snow crystals; F. J. W. Whipple 53
Boerema, J.—Rain-days in Java and Madoera ; J. Glasspoole... 145
Braak, C.—Climate of the Netherlands : Air- and earth-temperature; S. T. A. Mirrlees 217
British Rainfall, 1931 167
Brooks, C. F. and E. M. Fitton —Soil temperatures 46
Brunt, D.—Combination of observations; J. Wishart ... 69
Casella & Co., Ltd.—Casella Patent Barometers; J. Belasco 72
Castens, G.—Wetterhaftigkeit; A. F. Crossley 74
Conrad, C. and M. Winkler—Schneedeckinverhältnisse in osterreichischen Alpenländern 166
Conrad, V. and E. Biel—Isanomalen der andauer einer bestimmt vorgegebenen temperatur 166
Crowther, J. G.—Osiris and the atom 292
Dines, W. H.—Collected Scientific Papers; E. G. Bilham ... 105
Eginitis, D.—Annales de l'Observatoire National d'Athènes; S. T. A. Mirrlees 144
Ficker, H. von—Wetter and Wetterentwicklung; C. K. M. Douglas 95
Fitton, E. M., and C. F. Brooks —Soil temperatures in the United States 46
Ghatagei, V. M., and S. K. Banerji—Discontinuous fluid motion; (Sir) G(ilbert) T. Walker 291
Grundmann, W. and O. Moese—Trübungsfaktor und Luftkörper bei Wetteranalyse; C. K. M. Douglas 242

PAGE

Haeberlin, C. and P. Perlewitz —Klima Atlas 291
Humphreys, W. J. and W. A. Bentley—Snow Crystals; F. J. W. Whipple 53
India Meteor. Dept., Sci. Notes, Vol. I, No. 9 and Vol. II, No. 11; S. T. A. Mirrlees ... 265
— —, Vol. I, No. 10; S. T. A. Mirrlees 170
— —, Vol II, Nos. 15-17 ... 20
— —, Vol. III, Nos. 18-19 ... 44
— — —, Nos. 22 and 24; C. K. M. Douglas 169
— — —, Nos. 26 and 28; C. K. M. Douglas 143
— —, Vol. IV, No. 39; W. C. Kaye 264
— — —, No. 42; L. H. G. Dines 144
International Atlas of clouds (abridged edition); G. A. Clarke 225
Kentucky Geological Survey, Climate of Kentucky 20
Kidson, E.—Rainfall in New Zealand; J. Glasspoole ... 96
— and A. Thomson—Thunderstorms in New Zealand; J. Glasspoole 97
Köppen, W.—Grundriss der Klimakunde 141
Maguire, C. J.—Aerology; S. F. Witcombe 45
Maps showing the rainfall of Australia and Tasmania; J. Glasspoole 218
Memorie del R. Uff. Centr. di Meteorologia et Geofisica Rome 168
Moese, O. and W. Grundmann—Trübungsfaktor und Luftkörpen bei Wetteranalyse; C. K. M. Douglas 242
Naqvi, S. N. and B. Ali—Frost and the preceding meteorological conditions ... 96
Negretti and Zambra—Standard Meteorological Instruments and Mercury-in-steel thermometers; J. E. Belasco ... 21
New Zealand Meteorological Observations for 1929; J. Glasspoole 74
Perlewitz, P. and C. Haeberlin —Klima Atlas 291
Phenologica, Acta, Vol. I, Parts 1-6; R. Marshall ... 241

PAGE

Schonken, J. D.—Our natural water supply 142
— Plant life and the siccation process 142
Semmeringgebietes, Klima des... 166
Shaw, Sir Napier—Manual of Meteorology, Vol. IV; E. Gold 1
Sjöström, M.—Pyrheliometric measurements of solar radiation in Upsala, 1909-22; D. Brunt 71
Smithsonian Meteorological Tables; S. T. A. Mirrlees ... 45
Thomson, A. and E. Kidson—Thunderstorms in New Zealand; J. Glasspoole 96
Veröffentlichungen des Forschungs-Institutes der Rhön Rossitten-Gesellschaft e V.; C. K. M. Douglas 43
Winds, weather and currents on the coasts of India; S. T. A. Mirrlees 293
See also Official Publications.
Reynolds, W. D., Reflection rainbows 213
Rhön-Rossitten Co., Publications of the research institutes of 43
Rome, Memoirs of the Roval Central Meteorological Office ... 168
Rothamsted, Rainfall at 113
Rowswell, B. T., Record dry winter at Guernsey 92
Russell, S., Optical phenomena ... 64
Sargeant, R. B. 146
Saxby, T. E., Heavy rainfall and flooding in Unst, Shetland ... 184
Schonken, J. D., Our natural water supply (review) ... 142
—, Plant life and the siccatiom process (review) 142
Scotland, Drought in 32
—, Mildness of the winter, 1931-2 119
Shaw, E. M., Line squall in Cornwall 215
Shaw, H. K., Swan song of the Radcliffe Observatory ... 286
Shaw, Sir Napier and L. G. Garbett, A new wind rose ... 254
Sheerman, J. 218
Sherwood, J. R., Mirage off Newfoundland 259
Shyok Dam 165
Sierra Leone, Daylight saving Bill 267
Sil, J. M., Variations in potential gradient 136
Simpson, G. C. 243
—, Colour of moonlight 234

PAGE

Sjöström, M., Pyrheliometric measurements of solar radiation in Upsala (review) ... 71
Smith, J. S., Alto-cumulus formed by an aeroplane 139
—, Rapidly dissolving anvil cloud 115
—, Tornadoes at South Farnborough 162
Smithsonian Meteorological Tables 45
Snow crystals 58
— in April 93
Snowless winter 38
Soil physics in relation to meteorology 62
Solar phenomena observed at Hastings 64, 236, 285
South African meteorological service 122
South Farnborough, Tornadoes at 162
Squall, Autographic records of a "Sumatra" 259
— in Cornwall, Line 215
Stewart, C. 122
Stonyhurst College Observatory ... 170
Storm in the Bay of Bengal, Nov. 13th-19th, 1928 169
— of November, 1926 264
Storms that just fail to come off... 137
Summer in 1778, Warm 289
Sumatra squall, Autographic records of a 259
Sur, N. K., Winds in higher levels over Agra (review) 20
Süring, R. 267
Sussex, Tornado in 186
Sutcliffe, R. C., Rainfall of Malta and long-period forecasting ... 203

Tasmania, Rainfall maps of ... 218
Taylor, G. I. 294
—, Resonance theory of semi-diurnal atmospheric oscillations 135
Temperature, Air and earth ... 217
— below turf, Variation of soil ... 135
— in the lower stratosphere ... 170
— in the upper atmosphere over Agra and India 143
Temperatures in early spring, Maximum day 95
— in the United States, Soil ... 46
— in various Stevenson screens ... 265
— on mountains, Winter minimum 12
—, Screen and hangar minimum 116
—, Terrestrial 252
Thermometers, Comparison between two 4-ft. earth ... 13

PAGE

Thermometers for disposal, Earth 290
—, Mercury-in-steel 21
—, Muslin caps for wet-bulb ... 16
Thomson, A. 47
— and E. Kidson, Thunderstorms in New Zealand (review) ... 97
Thunderstorm, Aug. 12th, 1932 186, 210
— in Fiji, Severe 67
— phenomena 184, 211
Thunderstorms in New Zealand, Occurrence of 97
—, Summer 63
Topping, K. M., Unusually persistent rain 13
Tornado in Sussex 186
—, Wind velocity in a 263
Tornadoes at South Farnborough 162
Turbidity factor and air mass in weather analysis 242

Ungava Bay, Summer weather in 156, 210
United States, Hurricane in eastern 216
— —, Soil temperatures in the ... 46
Unst, Shetland, Rainfall in ... 184
Upper air investigations, Italian... 141
Upsala, Pyrheliometric measurements of solar radiation at ... 71

Visibility at sea 36
— with saturated air, Surface ... 7
Visual range of lights at night... 37
Volcanic dust over the globe ... 81
— eruptions and actinometry ... 86

Wagner, A., Variations of the general circulation 9
Walker, Sir Gilbert T., Discontinuous fluid motion under different thermal conditions (review) 291
—, Unusual cloud formation ... 235
— and E. W. Bliss, World weather 284
Waltham Cross, Effect of hills on winds at 129
Waringstown, Halo structure at... 116
Water drop suspended in the atmosphere, Thermal balance of ... 283
— spouts at the Lizard 161
— supply, Our natural 142
Waterer, D., Unusual thunderstorm phenomena 184
Watkins, H. G. 193
Watson, R. E., Meteor seen from Eskdalemuir 214
Weather analysis, Turbidity factor and air mass in 242
— and weather forecasting ... 95

PAGE

Weather chart of the northern hemisphere, International ... 236
— in England, August, 1932, ... 177
— in Ungava Bay, Summer 156, 210
— of October, 1932 257
— of the British Isles and ice in Davis Strait 153
— of 1932 ... ... 273, *monthly*
Weather-types 74
Weather, World 284
Wegener, K. 267
Wei Hai Wei, Dust haze at ... 240
Wet week-ends in 1931 43
Whipple, F. J. W., Problems in meteorological optics ... 109
—, Snow crystals 53
Whitaker, J. A. C., Winter minimum temperatures 12
Wigand, A. 294
Williams, G. B., Rainfall of Assam 113
Wind and tide 34
— at Agra and its structure ... 44
— — Bell Rock, High 133
— — Heliopolis, Egypt, Katabatic 228
— gradients in inversions, Breakdown of steep 284
— over level country, Structure of 114
— velocity in a tornado 263
— rose, A new sort of 254
Winds in a valley, Katabatic ... 254
— — higher levels over Agra ... 20
— — London in the 19th century 56
— — the first 3 Km. over Port Blair 20
— of low velocity at Waltham Cross 129
— up to 3 Km. monthly average frequencies 20
—, weather and currents on the coast of India 293
Winter at Guernsey, Record dry 92
—, 1931-2, in Scotland, Mild ... 119
Wishart, J., Combination of observations (review) 69
—, Secular variation of rainfall at Rothamsted 113
Witcombe, S. F., Aerology (review) 45
Witton, Earth thermometers for disposal, West 290
Woodhead, L. S., Tornado in Sussex 186
Wright, H. L., Variation of soil temperature below turf ... 135

Zi-ka-Wei Observatory 243

ERRATA

See pages 23, 171, 267, 295.

CORRIGENDUM

See page 122.

ILLUSTRATIONS

	PAGE
Monthly means of two 4ft. earth thermometers	14
Muslin cap for wet-bulb thermometers	16
Mean Pressure map, northern hemisphere, February, 1932	30
Pressure isonomalies, northern hemisphere, February, 1932	31
Snow crystals	*facing p.* 53
Winds in London during the early 19th century	59
Mean pressure maps, British Isles, 1794-1810 and 1811-27	61
Isochrones of the spread of the dust cloud due to Andine eruptions	83
Movements of cirrus clouds, Oct. to Dec., 1883, following Krakatoa eruption	83
Splash-meter	87
Cirrus band, Upper Heyford, March 20th, 1932	*facing p.* 94
Sights for anemometer vane	*facing p.* 95
Metamorphosis of arcs touching the 22° halo	110
Halo phenomena	111
Roll cloud seen from Bournemouth, 5 p.m., April 30th, 1932	*facing p.* 129
Wind frequency at Waltham Cross, 1925-31	130
Map showing probable " sheltering " by hills from winds	131
Synoptic chart 13h., January 13th, 1932	134
Anemogram, Bell Rock, January 13th-14th, 1932	*facing p.* 134
Granite obelisk shattered by lightning	*facing p.* 135
Halos of May 10th, 1932, Padstow	138
Changes of pressure corresponding to changes of Davis Strait Ice	154
Davis Strait Ice	155
Rain-gauge of special construction for making short-period measurements	160
Rainfall recorded each quarter of an hour by Colombo pluviographs	181
Unusual cloud formation	185
Integrated percentage frequencies of daily rainfall at Kilmarnock, 1901-30	202
Daily rainfall at Malta	204
Annual rainfall at Malta	205
Supplementary tangent arcs to the 22° halo	213
Reflection rainbows	214
Delicate cirrus in the form of hooks	*facing p.* 225
Map of neighbourhood of Heliopolis	229
Wind and temperature records showing katabatic wind effects	231
Haboob at Khartoum, June 7th, 1932	*facing p.* 249
Duration of lightning flash	257
Autographic records at Bukit Jeram, Malaya, July 16th, 1932	260
Beaufort scale of wind force	282
Solar phenomena observed at Hastings	286
Locking of rain-gauge funnels	*facing p.* 290